

# Halifax Harbour Water Quality Monitoring Project

## Weekly Summary #54

**Survey Date:** 29 June 2005  
**Nature of Survey:** Coliform Survey  
**Report File (this document):** HHWQMP\_report054\_050629.doc  
**Data File:** HHWQMP\_data054\_050629.xls

**Data Return:**  
 Profile: 100%  
 Bacteria: 100%  
 Chemical: na  
**Overall: 100%**

**Sample Notes:**

None

**QA/QC samples:**

**Fecal Coliform (CFU/100ml)**

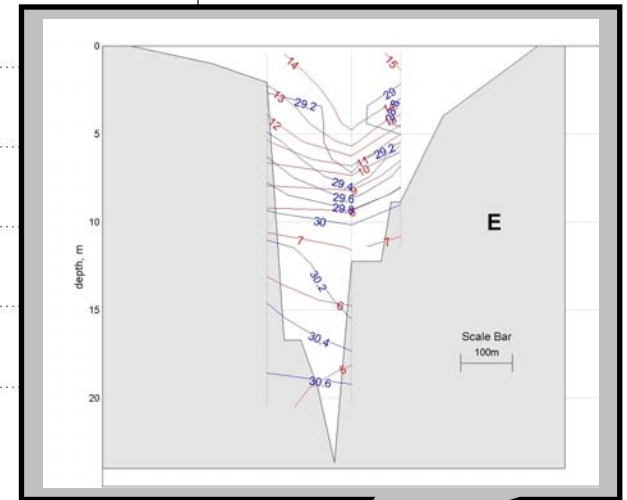
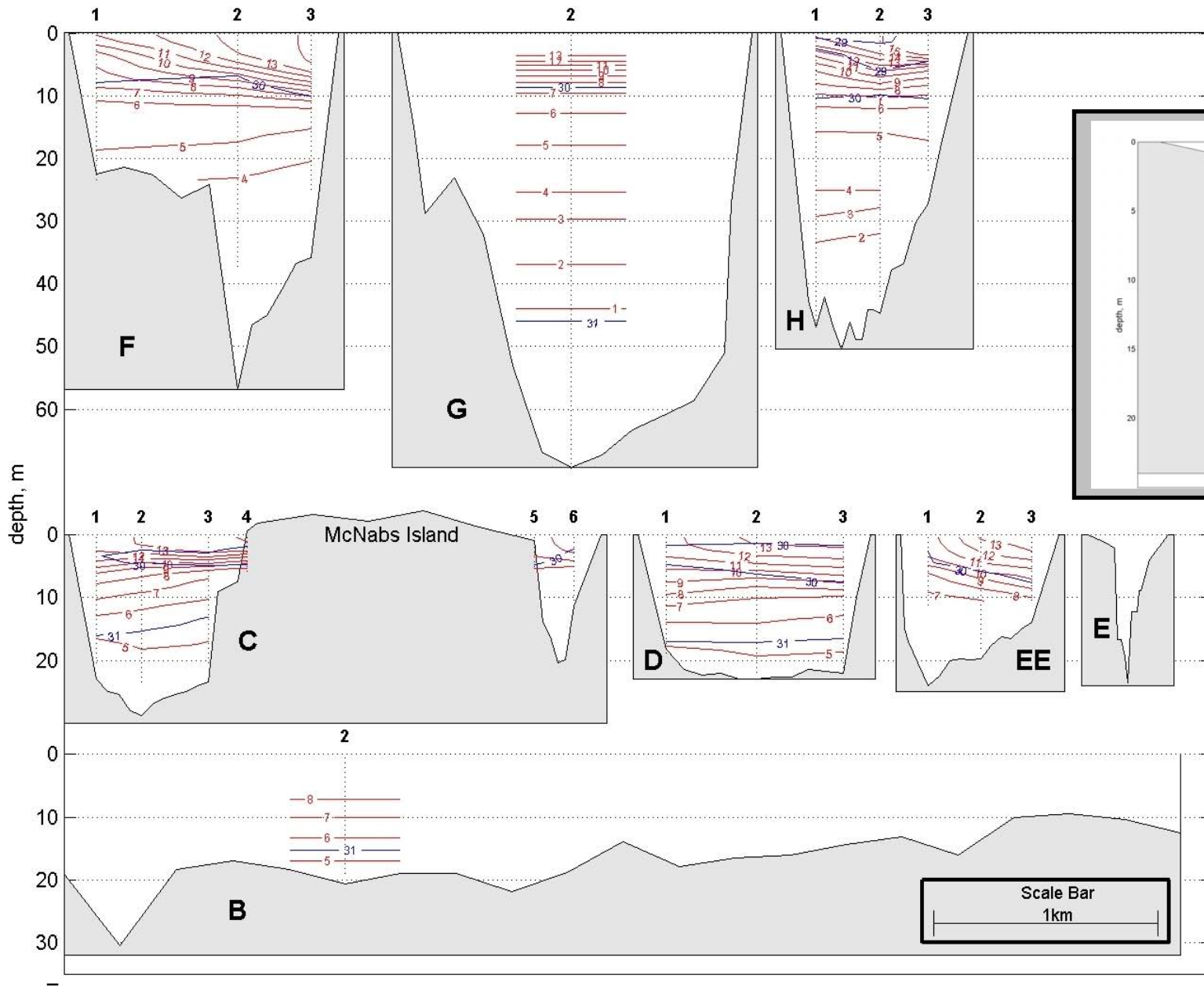
Site	BYC-1m	G2-1m	C6-10m	SYC-1m
Reference	13	150	1	0
QA/QC	20	230	0	0

**Comments:**

**Dissolved Oxygen:** The only dissolved oxygen values below applicable guidelines are the typical depressed values in the bottom water of Bedford Basin. The 7.0 mg/L delineation is at approximately 40-50m with minimum values currently below 6 mg/L. Elsewhere the dissolved oxygen in the surface water (<20 m) is quite uniform with values generally between 8 and 9 mg/L and a trend toward slightly higher values in the outer Harbour (B and C stations).

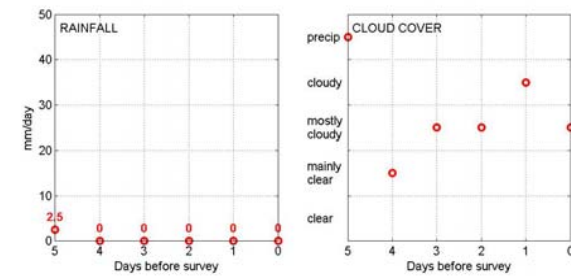
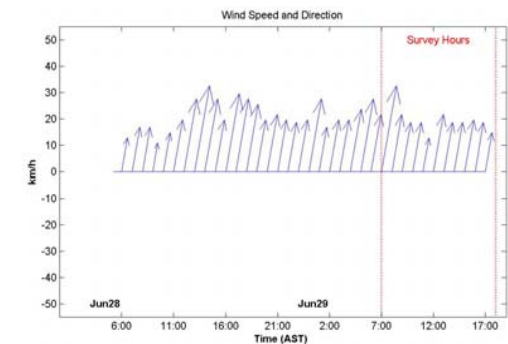
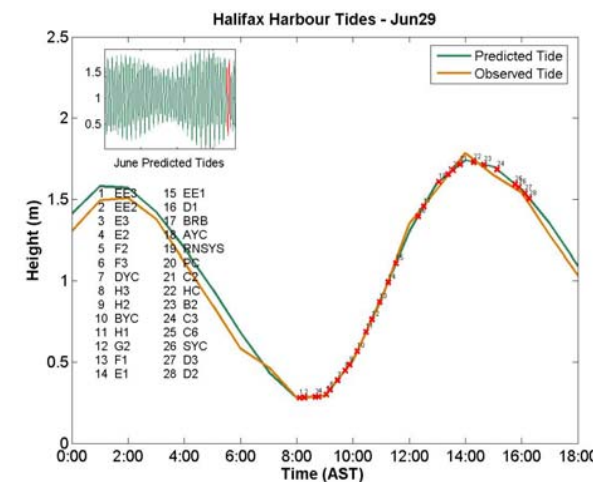
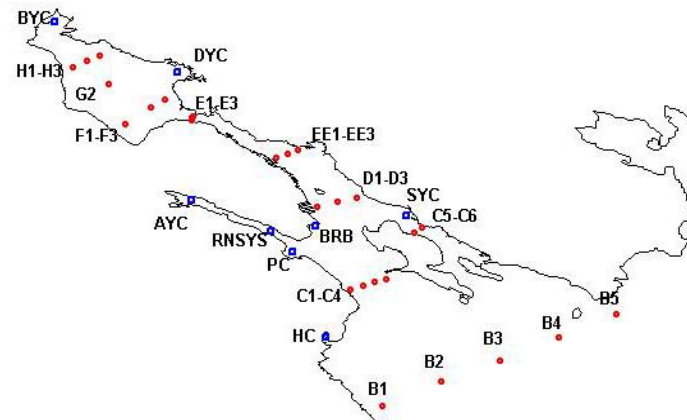
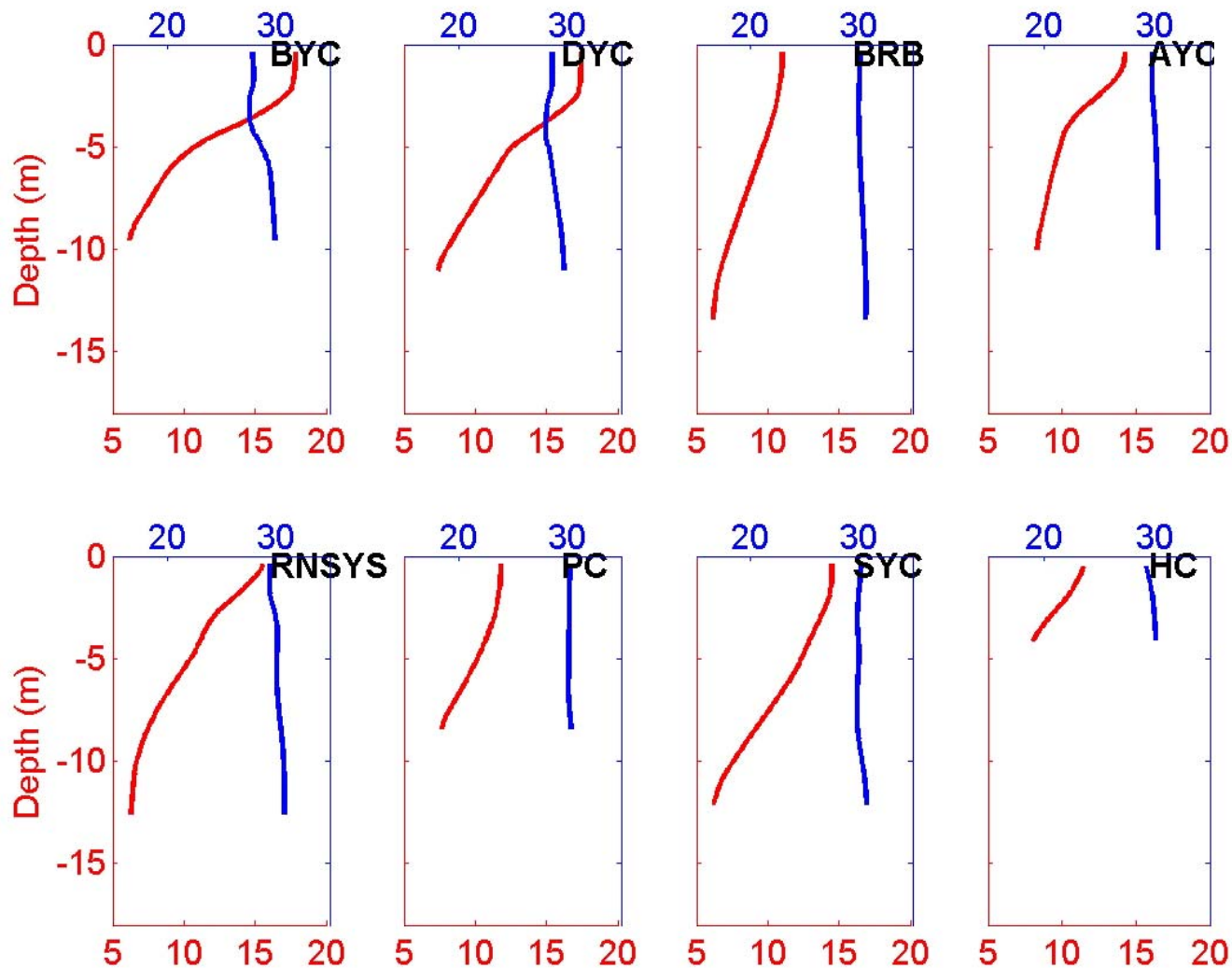
**Chlorophyll:** The fluorescence data is quite uniform north of section D with profile maximum values on the order of 10 mg/m<sup>3</sup> at depths of between 4 and 10 m. The sole exception is the BYC station at the head of Bedford Basin which exhibited a maximum of 27 mg/m<sup>3</sup> at a depth of 3 m. South of section D the values were on the order of 2 mg/m<sup>3</sup>.

**General:** Overall the continued relatively dry weather and resulting reduced freshwater input has resulted in low salinity stratification throughout the harbour. The Harbour is warming with typical surface temperatures of 13-14° C and typical vertical temperature variation of 10° C inside of McNabs Island. The net result is that the density stratification has decreased since last week. The persistent moderate SSW winds which oppose estuarine circulation have resulted in less-dense water being pushed into the Harbour and against the eastern shore. This phenomenon is also visible in the fecal coliform data which exhibits high values in the near surface water of the northern end of the Inner Harbour (EE), Narrows (E) and southern Basin (F), with the highest values on the eastern side. The fecal coliform values are not particularly high, but are higher than the previous week, possibly due to the cloudier conditions this week.

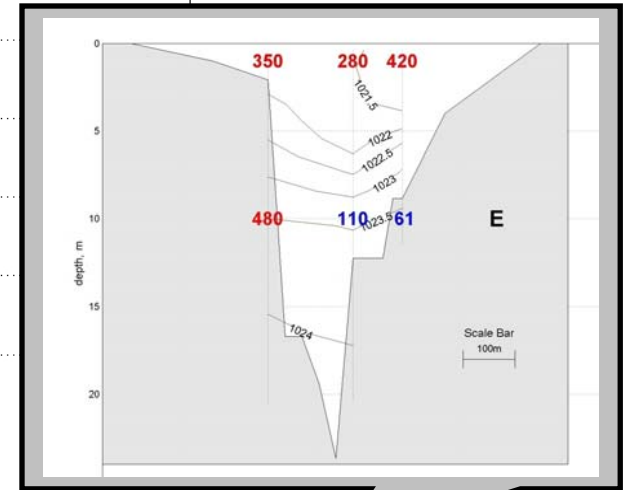
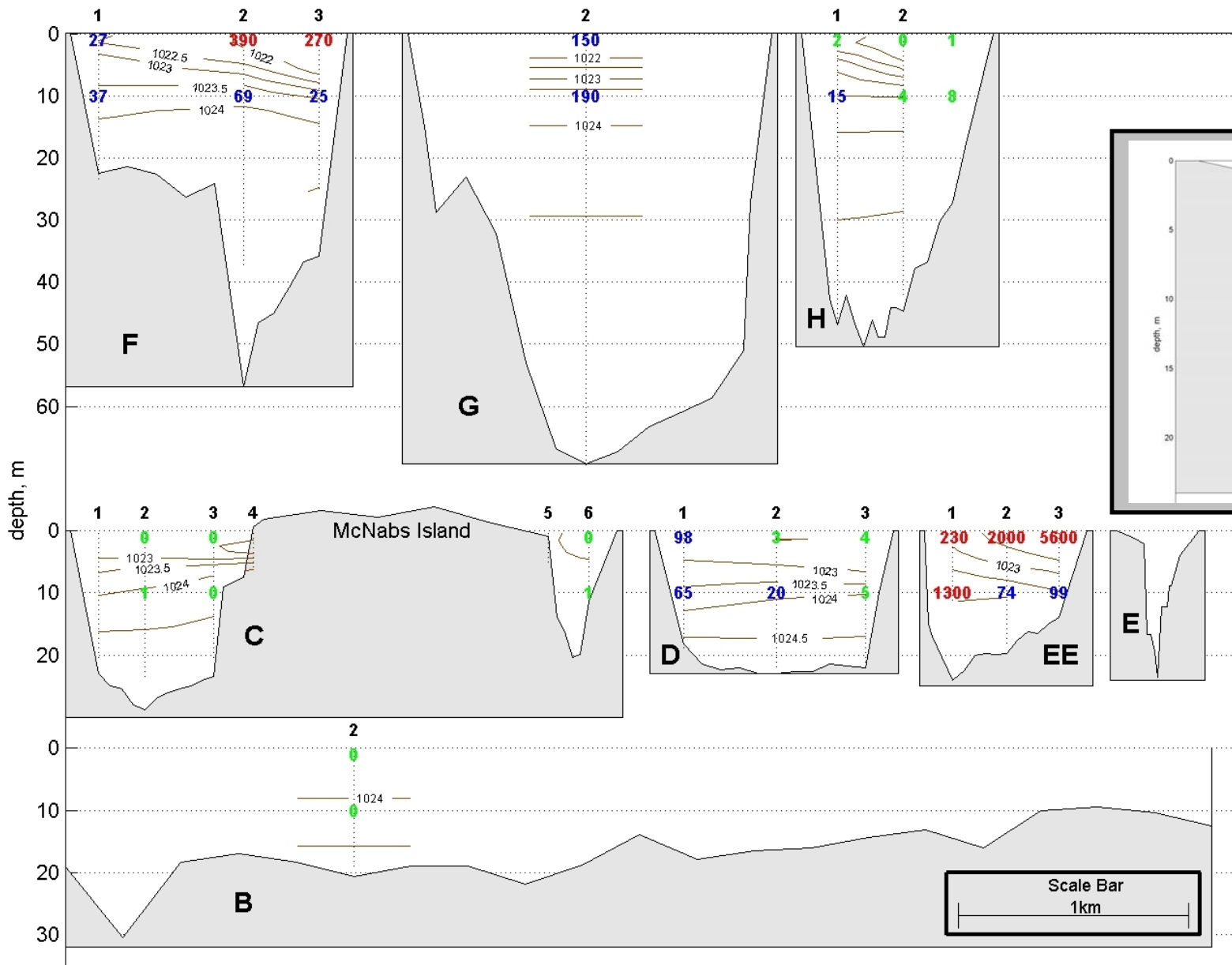


Unless otherwise labeled:  
 - salinity contour interval is 1 PSU  
 - temperature contour interval is 1°C.

# Yacht Clubs

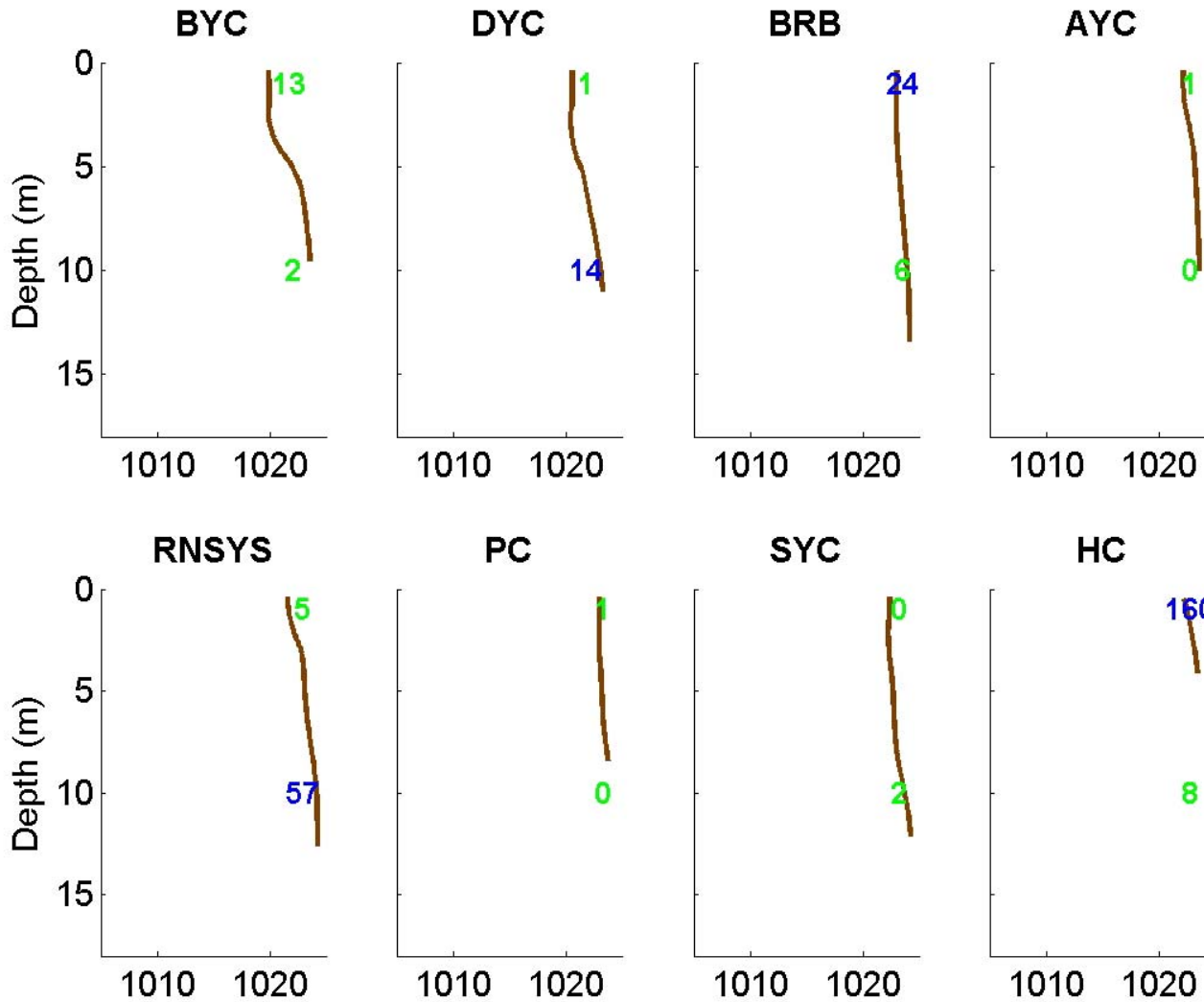


Salinity in PSU    Temperature in °C



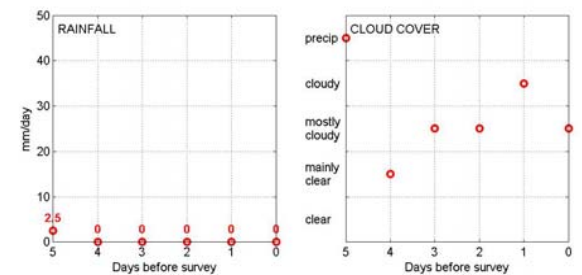
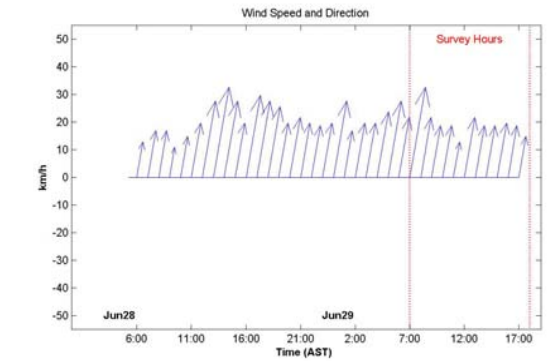
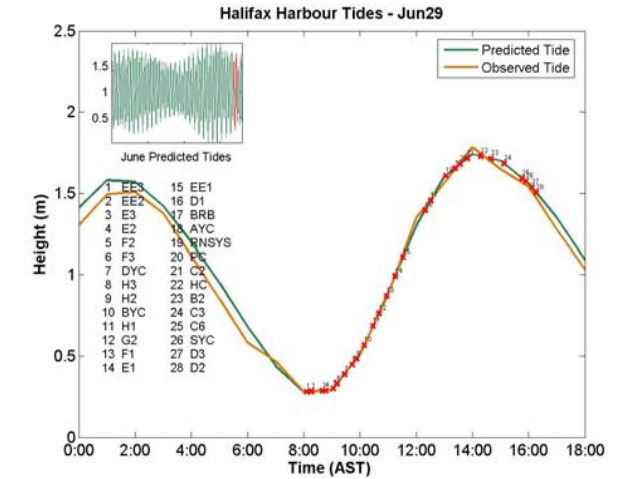
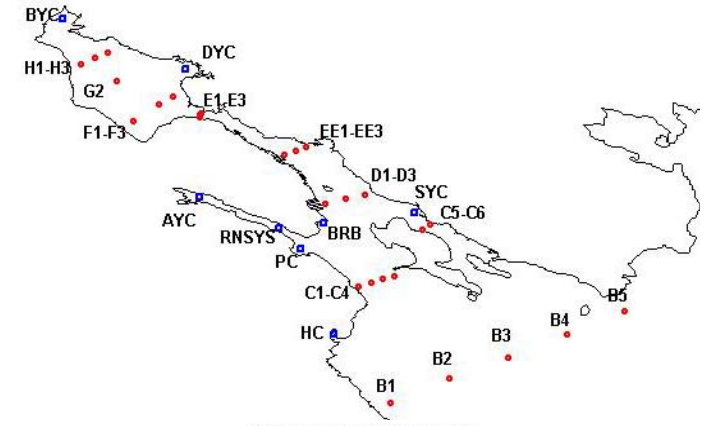
Unless otherwise labeled:  
 - density contour interval is 0.5 kg/m<sup>3</sup>

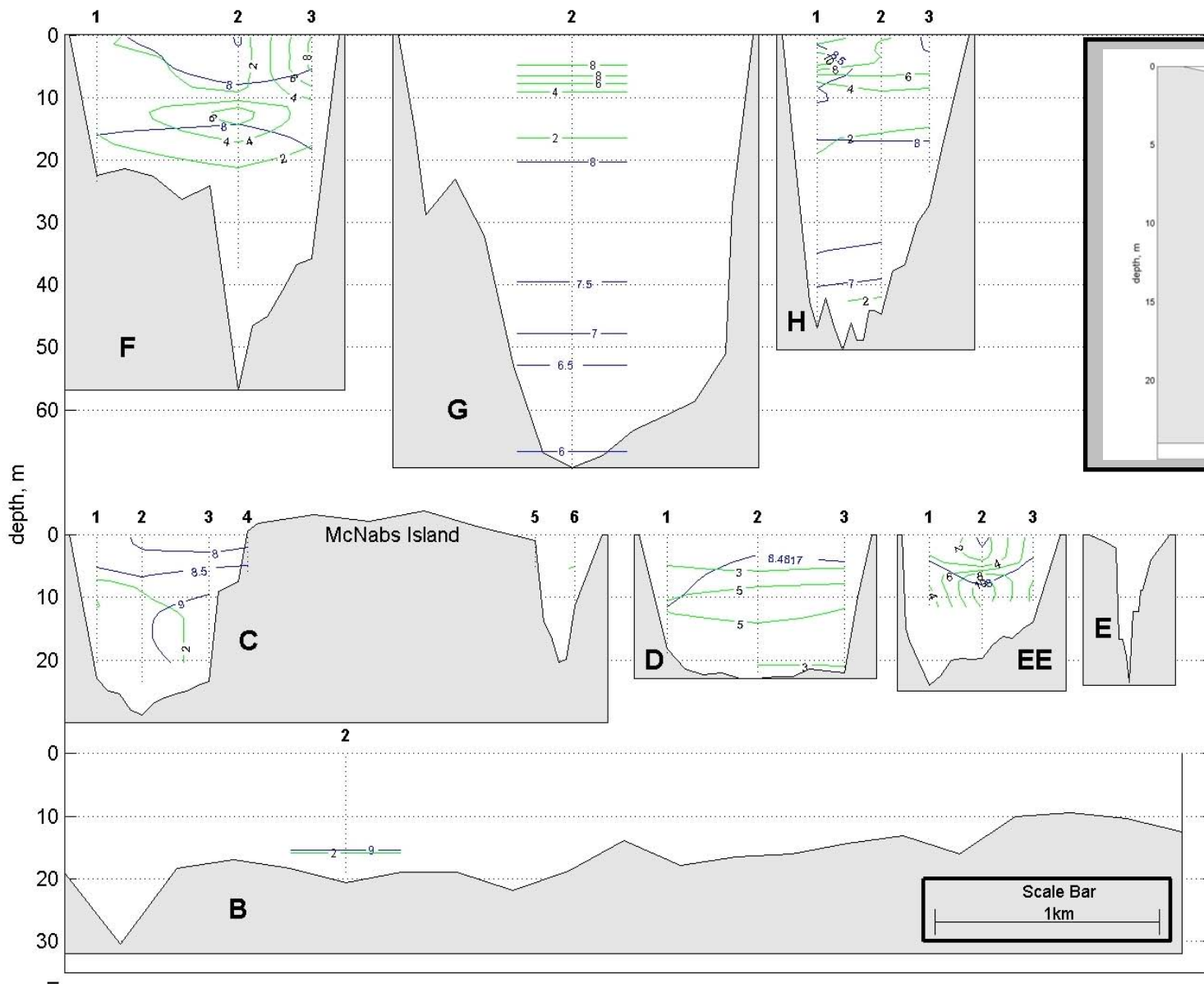
# Yacht Clubs



Potential Density in kg/m<sup>3</sup>

Fecal coliform: **above swimming limit (200 cfu/100mL)**  
**above shellfish limit (14 cfu/100mL)**  
 below limits





Unless otherwise labeled:  
 - **dissolved oxygen** contour interval is 0.5 mg/L  
 - **chlorophyll** contour interval is 2 mg/m<sup>3</sup>.

# Yacht Clubs

